





mutual advantage and respect for both employer and employee. We have studied the case carefully, tried to be patient, considerate and just in our judgment, and we are satisfied that the trouble is not with the men, but with the management of the unions."

#### ARMED CAMP SURPRISED.

**TUG RIVER FRIENDS TAKEN.**  
BY THE NEW ASSOCIATED PRESS.—P.M.J.  
**THACKER (W. Va.)** June 30.—A posse of eight men went to the Kentucky side of Tug River early this morning and captured nine miners who are charged with terrorizing the miners of the West Virginia side of the river for the past ten days, by shooting at all who could not give the proper signal as they passed and re-passed along the railroad.

"They were surprised in their sleep with their Winchester rifles and shotguns, and surrendered without little resistance. Even their guard was captured asleep on duty. They were brought to this place and held under heavy guard, awaiting the train to take them before a Kentucky judge who remanded them to Judge Jackson at Parkersburg, W. Va.

Later in the day, Charles Burke, president of the local union of United Mine Workers of America, was also arrested. He was taken to Parkersburg on the charge of terrorizing the miners of the West Virginia side of the river for the past ten days, by shooting at all who could not give the proper signal as they passed and re-passed along the railroad.

It is generally believed that this will break up the fighting end of the strike, and that the different sides will soon be compromised in a satisfactory manner.

#### HOOP TRUST'S EMPLOYEES TO BE CALLED OUT.

**FIFTY THOUSAND, ALL TOLD, MAY BE AFFECTED.**

President Shaffer Says the Fight Against the Mills Will be to the Death, Chicago Wood-workers to be Called Out.

**PITTSBURGH (Pa.)** June 30.—President T. J. Shaffer of the Amalgamated Associations of Iron, Steel and Tin Workers will tomorrow morning issue an order calling out all the employees of the various mills of the American Sheet Steel Hoop Trust, known as the Hoop Trust. It is estimated that 15,000 men will be subject to the call, which, in connection with the big strike of the American Sheet Steel Company ordered by President Shaffer Saturday, will affect 50,000 men. President Shaffer said tonight:

"The open mills to be notified are: One at Hollidaysburg, Pa.; three at Pittsburgh and one at Monaca. The notified mills which close on Sunday are: The upper and lower mills at Youngstown, O.; Pomero, O.; Sharon, Pa.; Girard, Pa.; Warren, Pa.; Greenfield, Pa. This, I believe, will bring the number of men affected up to 50,000."

"It is a matter of regret that the issue has been formed, but it now looks though it will be a fight to the death. We have funds, and will use them. If it is to be a strike, we will strike. It is a matter of life and death. We are not dealing with us have but little idea of the extent to which the strike will be carried out."

#### FRASER RIVER STRIKE.

**WHITES VERSUS THE JAPANESE.**

**VANCOUVER, B. C.**—[Exclusive Dispatch.] The Fishermen's Grand League, in special session this morning, declared a strike against the cannery owners of the Fraser River. It represented practically the unionization of 600 white and Indian fishermen who have refused to take a single boat on account of the low price of fish during the busy season of the month of July and August, while the fishermen insisted on 12 1/2 cents right through the season.

The decision today is disputed by both sides in the long-standing dispute as to the cannery owners and the fishermen. There are three thousand of the latter ready to fish next week. The fishermen are every protection by the cannery men. Early in the season, the Japs promised the white fishermen to stand by them in their contention for higher prices, and up to ten days ago the Japs said nothing to the contrary. Last week, however, they signed contracts with the cannery men at the latter's prices, and the feeling against them became bitter.

The fishermen declare they will not hurt the Japs personally, but will stop them from fishing and smash and sink their boats and cut up their nets.

#### OTHER LABOR TROUBLES.

**CHICAGO'S WOOD-WORKERS.**

**CHICAGO, June 30.**—Wood-workers to the number of 300, employed in the manufacture of bar, store and office furniture in Chicago, in all probability will be called out on strike Tuesday. The present agreement of the union men with the manufacturers expires tomorrow. A counter proposition from the manufacturers was rejected today by the union.

#### CASH REGISTER CONFERENCE.

**WASHINGTON, June 30.**—The conference today between the representatives of the employees of the National Cash Register Company of Dayton and of the company itself was not entirely satisfactory. The machinists were granted what they asked—nine hours work at the rate of pay hitherto prevailing, but the employers, buffers and glass molders will have to fight for what they demand.

#### ENTICED OUT AND BEATEN.

**KNOXVILLE (Tenn.)** June 30.—Three employees of the Southern Railway shops at this place, employed in the place of striking machinists were enticed out of the city limits last night and badly beaten. One of the injured men is in a dangerous condition.

#### NO SCALE ADOPTED.

**EFFORTS IN MISSOURI WASTED.**  
BY THE NEW ASSOCIATED PRESS.—P.M.J.  
**KANSAS CITY (Mo.)** June 30.—The conference of coal miners and operators of district 25, which includes Leavenworth county, Kan., and all Missouri, except Bates, Barton and Vernon counties, has adjourned without having agreed on a wage scale. John Mitchell, national president of the miners' organization, left for St. Louis last night, but will return again July 15, when another attempt will be made to come to an agreement.

The conference for district 25, 14, including Bates, Barton and Vernon counties, Missouri, and all of Kansas, Leavenworth county, adjourned

after having finally arranged a satisfactory contract for next year in all of the sub-districts.

#### "VOYAGING" CAMP.

**CINCINNATI (O.)** June 30.—The project of an outing camp for the striking machinists will be carried out this week. Tomorrow tents and other shelters will be put in in Myers Grove, from the outskirts of Dayton, Ky. The place has been secured for the use of the men for the next few weeks as a means of lightening the expense of carrying on the strike, as well as to keep the men all together. The camp will be thoroughly organized and equipped.

#### SALT UNION'S COMBINE.

**HAS NO AMERICAN END.**  
BY THE NEW ASSOCIATED PRESS.—P.M.J.  
**LONDON, July 1.**—[By Atlantic Cable.] Some misunderstanding seems to have arisen in the United States as to the nature of the combination completed last Friday at the meeting of the Salt Union in Liverpool. As a matter of fact, the announcement made by Mr. Ward, president of the Salt Union, referred only to the completion of the British combination. It is asserted that the Salt Union had no knowledge of any American combine.

#### OBITUARY.

**Ex-Atty.-Gen. Hart.**

**SACRAMENTO, June 30.**—Ex-Atty.-Gen. A. L. Hart, who died at Livermore today, was for many years a resident of Sacramento. He was 61 years of age. He studied law under Judge Archer of San Jose, and at the age of 21 years was admitted to practice. He was District Attorney of Colusa when 25 years of age, and in 1879 was renominated, but suffered defeat by his party's ticket. While Attorney-General he was in Washington and ably argued the railroad tax cases before the United States Supreme Court. In 1898, he removed to San Francisco, where he attended to much of the Southern Pacific Company's litigation. He leaves a widow and three children.

#### Rev. Dr. Sunderland.

**CATSKILL (N. Y.)** June 30.—Rev. Dr. Charles Sunderland of Washington, D. C., died here today from a blood clot on the brain. A Washington dispatch says Dr. Sunderland was 53 years old, and for more than sixty years had been an active minister of the gospel. For forty-eight years he was pastor of the First Presbyterian Church here, from which he retired because of advancing years. In 1898, he was pastor of the First Presbyterian Church here, from which he retired because of advancing years. In 1898, he was pastor of the First Presbyterian Church here, from which he retired because of advancing years.

#### Dr. Charles E. Pinkham.

**SACRAMENTO, June 30.**—Dr. Charles E. Pinkham, one of the best known physicians in this city, was found dead in his office this morning. Death is supposed to have resulted from a rupture of the heart. Dr. Pinkham was born in Maine, and came to California in 1871. He was a thirty-third-degree Mason.

#### Ex-Congressman Paige.

**NEW YORK, June 30.**—Col. David R. Paige, former Congressman from the Eleventh Ohio District, died today at his apartments in the Hotel Brunswick of a complication of diseases. He had been an invalid for many months.

#### Commodore Zeller.

**NEW YORK, June 30.**—Commodore Zeller, U. S. N., retired, died today at his residence in this city today from old age, in his eighty-third year. He was retired in 1898.

#### William D. Harrison.

**CHICAGO, June 30.**—William D. Harrison, the well-known billiard player, died here today after a long illness from liver trouble.

#### Mrs. Matthew Arnold.

**LONDON, July 1.**—Mrs. Matthew Arnold, widow of the British poet, critic and "apostle of culture," is dead.

#### SOCIALISTS IN OPPOSITION.

**Ex-Minister Carnegie's Followers Have a Fight with the Followers of Sebastian Faure—Many Are Injured.**  
BY THE NEW ASSOCIATED PRESS.—P.M.J.  
**LYONS, June 30.**—[By Atlantic Cable.] M. Godfrey Carnegie, former Minister of War, presided this afternoon at a meeting of the League of Patriots in Lyons. M. Sebastian Faure, socialist, organized an opposition meeting of Socialists, at which he violently denounced nationalism. Subsequently the Socialists marched in procession through the streets, shouting "Down with Carnegie!" "Down with the imperialists!" They became riotous, and several were arrested.

#### Would Sell His Soul.

**Carnegie Says He Would Give Anything to Live Half of His Life to Live Over Again.**  
BY THE NEW ASSOCIATED PRESS.—P.M.J.  
**LONDON, June 30.**—[Exclusive Dispatch.] T. P. O'Connor publishes a remarkable conversation which he had with Andrew Carnegie at Skibo, he says.

#### SAVED BY A LIFE-LINE.

**WINNIEG (Main.)** June 30.—Word reached here tonight of the wreck on Lake Superior of the steamer Preston, Capt. Barlow of Toledo, O. Saturday morning the steamer Albatross, Capt. McDougall, sighted the Preston, which was showing signs of distress, and at the mercy of a severe storm. She was water-logged, and twelve men and two women were clinging to the rigging. After great difficulty, the vessel with a life-line thrown by a rocket, and after four hours of struggle, rescued all 14. One man, William Eckert of Algonia, Mich., who was badly crushed and sank, was the only one of the crew who was landed safely at Fort William.

#### NEGROES SOUGHT REVENGE.

**Discharged Circus Employees Planned to Wreck the Circus Train, but the Southwest Express Was Smashed.**  
**CONNELSVILLE (Pa.)** June 30.—Five negroes who gave fictitious names were arrested here today and taken to Greensburg, charged with wrecking of the Southwest express near Greensburg yesterday, in which a number of passengers were hurt. They were discharged from a circus and sought revenge by ditching the circus train. The passenger train came aboard of the circus train and was wrecked.

#### MARTIAL LAW IN PANAMA.

**Rebel Forces Are Reported as Being Repulsed—Considerable Fighting in Progress in the Interior.**  
BY THE NEW ASSOCIATED PRESS.—P.M.J.  
**KINGSTON (Jamaica)** June 30.—[By West Indian Cable.] The steamer Orizaba arrived today from Colon, reports that martial-law has been proclaimed in Panama, owing to a report that the rebel forces were concentrating. It also appears that considerable fighting is in progress in the interior, and that the government is dispatching reinforcements.

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## WASHINGTON GOING HOME TO CANTON.

**The President to Leave Next Friday.**

**Preparations Made for Mrs. McKinley.**

**South Carolina and Stamps. Philippines' Trade Has Increased.**

#### BY DIRECT WIRE TO THE TIMES.

**WASHINGTON, June 30.**—[Exclusive Dispatch.] Preparations for receiving Mr. McKinley to Canton are practically complete. A private car will be placed at the disposal of the President, and every arrangement will be made for a comfortable journey. Dr. Riker will make every provision for caring for his patient on board the train, and the same as if he were in her own apartments at the White House.

While it is not anticipated she will have a sinking spell en route, yet such a contingency will, of course, be provided for. Mrs. McKinley is rapidly gaining strength, and has been taking carriage rides. Thus it is not apprehended that the trip will fatigue her to any appreciable extent.

President and Mrs. McKinley will leave here Friday, probably in the evening, to avoid the heat, and arrive in Canton in the morning. Mrs. McKinley is looking forward to the visit to her old home with much pleasure. The President and Mrs. McKinley expect to be gone from Washington about three months.

#### PHILIPPINE TRADE.

**BEST YEAR IN MERCHANDISE.**

**WASHINGTON, June 30.**—A marked increase in the trade of the Philippines during the colonial era over the preceding years of the previous year is set down in a statement given out today by the Division of Insular Affairs of the War Department. The value of imports of merchandise and silver for 1900 is set down at \$27,762,106, this, according to the War Department, is a record for the Philippines. The value of exports of merchandise and silver for 1900 is set down at \$27,762,106, this, according to the War Department, is a record for the Philippines.

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## RUINS IN CRETE.

**Important Archaeological Discoveries Being Made—More Money Needed to Continue the Excavations.**

**BY DIRECT WIRE TO THE TIMES.**

**LONDON, June 30.**—[Exclusive Dispatch.] At Thursday's meeting of the Society for the Promotion of Hellenic Studies, further interesting details were reported of excavations at Knossos, Crete. The palace discovered is found to be much more extensive than at first thought. Various wings have been opened, containing rooms, in which are many stone jars. There are also portions of a large central court, with stone staircases connecting various rooms. The palace is found to be a remarkable state of preservation. Carr Bonaguet, the new director of the excavations at Knossos, who has been working at Knossos, on the eastern coast of Crete, where he discovered a Mycenaean town and a series of houses in a remarkable state of preservation.

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## POLITICS IN AUTO RACE.

**Party Passion Aroused by Motor Cars.**

**Crimes of Automobilmism a Campaign Issue.**

**French Elections Likely to Be Influenced by Horseless Carriage Contest.**

#### BY DIRECT WIRE TO THE TIMES.

**LONDON, June 30.**—[Exclusive Dispatch.] There can be no more vivid or instructive object lesson in the French national character than two events of the week. The Paris-Berlin motor car race, and the smart society's fête at the Petit Trianon completely monopolize public attention, which showed complete indifference to the high court trial, debates in the Senate and Chamber in regard to the Association Bill, and the workmen's pension act, and at every Parliament's debate. The race has called forth renewed outbursts of party passion, and far-sighted men predict that the motor car will be a leading factor in the coming general elections.

The Libre Parole started the ball rolling by violent denunciation of the French nation for its attitude toward the American duty against French car race, and the smart society's fête at the Petit Trianon completely monopolize public attention, which showed complete indifference to the high court trial, debates in the Senate and Chamber in regard to the Association Bill, and the workmen's pension act, and at every Parliament's debate.

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## THE PEOPLE'S COLLEGE.

## The Times' Current Topics Club.

Papers by Experts and Specialists. Six Courses of Study.

## ILLUSIONS.

## II.—GEOMETRY AND THE EYE.

(By Dr. L. Madison Bentley, Instructor in Psychology, Cornell University.)

There is nothing to which mankind points with greater pride than to what is pleased to call its "general principles," its "axioms." An axiom is a thing so ultimate, so unimpeachable, that no one is able to resist its charms. The very kernel of experience is contained in it. It represents generation after generation in the remembrance of knowledge. Imagine the cave man making a formulation of Newton's third law of motion. To be sure, he knew that he rebounded if he ran into a tree in the darkness, but he could not make an accurate quantitative statement of the general relation of action and reaction that he could find.

Notwithstanding our pride in axioms and "general laws," we are continually finding contradictions between them and our every-day experience. At such times reliable knowledge is absolutely unavailable until we recognize our liability to deception. One must learn to distinguish what appears to be true from what is true. We are in the habit of saying that "seeing is believing," and are inclined to regard the "unseen" as vague and undefined. There seems to be a finality about direct visual knowledge from which there is no appeal. And yet, as we have seen, the more the eye is studied the longer grows the list of its imperfections and shortcomings. It is, then, very essential that we know when to believe "on sight" and when to appeal to some higher authority than the eye, to some general principle.

## THE LAKE THAT STOOD ON EDGE.

Nothing is more common than to accept the general testimony of mankind, that the fact that water will seek its own level. Nevertheless, the writer was, not long ago, a lake that was to all appearance standing on edge, although the water was as calm and unmoved as a mass of quicksilver. The tilt was so unmistakable as to suggest a surface of glass or other similar solid. The circumstances under which the experience occurred were as follows: I was climbing one of the high peaks of Central Colorado, and was within a quarter of a mile of the summit, when I came suddenly upon a small, circular body of water. It lay a little to my right in a level plain of perhaps 20 yards extent. The point formed a deep notch in the steep descent of the mountain side and the lake rested at the inner edge of the level just under the lee of the abrupt peak. The tilt of the lake was downward toward the right, the water was ready to rush in that direction. The following diagram will make this clear. The slope at the right is broken by the plain, and the broken line indicates the apparent surface of the water.



FIG. 1.

It seemed reasonable to suppose that if the illusion were due to the general environment it ought to be observable on other mountain lakes which were similarly situated. After several days' tramp over other foolish lakes were found in the same unstable position. The surrounding peaks, the plain, the barren isolation—were the same in all three cases. The puzzling thing was to find the explanation. And still the conditions were not complex. They seem to be included, all of them, in the figure given above.

## ILLUSIONS OF ANGLES.

Upon reflection there appeared to be two separate factors which combined to produce the illusion. They were these: The under-estimation of large angles and the displacement of the subjective vertical. Let me explain. The surrounding peaks, the plain, the barren isolation—were the same in all three cases. The puzzling thing was to find the explanation. And still the conditions were not complex. They seem to be included, all of them, in the figure given above.

## HOW TO GET OUR BEARINGS.

This is, however, only one element in the explanation. The other I have called the "displacement of the subjective vertical." Every one knows how difficult it is to think of the inhabitants of our antipodes as living on the other side of the globe without also thinking of them as standing on their heads. We can think of an individual as standing right-side-up in Manila or Sydney, but the instant we visualize him as stationed on the opposite side of the sphere on which we stand his feet go up and his head goes down. "Up" is up and down is down, we say to ourselves, "and there is no use juggling with the facts." Of course, we "know" better, but after all, we see our far-off cousin sticking up by his feet to the earth as the fly sticks to the ceiling.

## FIG. 2.

Notice that the vertical tip toward the side of the unlevel right angle. The illusory effect is exaggerated by having the two illusions—the illusion of over-estimation—the illusion of under-estimation—play into each other's hands. The under-estimation of large angles, force the vertical toward the left, and the large angles, seen too small, increase the displacement. The effect becomes more striking if the vertical and the oblique are continued beyond the horizontal. Thus:

## FIG. 3.

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The other is Wundt's figure:

## FIG. 6.

Look along the lines a b and c d in the two figures. You will see that they seem to curve. The lines in the Hering figure diverge at the center; those in the Wundt figure converge. If you now lay your ruler along any one of the four lines you will find that it is perfectly straight. It is the angles at the center of the figure which produce the illusion. Each one of which forms two obtuse angles with the horizontal. Consider the acute angles as appearing too large—having their limiting sides spread in—and you will easily get the secret of the illusion. The principle is precisely the same as in the overestimated right angle which we discussed a moment ago. The illusion is plain in the Hering and Wundt figures because the effect of all the oblique is summated. Each angle contributes its mite toward the total result.

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## FIG. 7.

If you will examine any two adjacent lines you will find that they are formed by the oblique have exactly the opposite effects. One line is turned to the right at the top; the other to the left.

## FIG. 8.

All these figures belong to the group of illusions of direction and they all rest upon the fact that we habitually mistake the size of angles. This is not a final explanation. You will note that we see large angles too small and small angles too large. The question is entirely unexplained by the fact that we underestimate the angle what will be the result? It is clear that the sides will be tilted in opposite directions. That is, the mountain slope will seem steeper than it is, and the lake will be tilted in the opposite direction. The effect will be illustrated by the following simple construction:

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The lines c and d stand for the mountain and the lake, respectively; the dotted line is the true vertical; a is the subjective (or illusory) vertical, and b is the subjective (or illusory) horizontal, which is at right angles to a. Now, if it is the apparent horizontal, the lake surface must appear to stand at a sharp incline tending downward toward the mountain. As we have seen, this is exactly what occurred.

## FIG. 10.

We are, therefore, why the illusion was such a striking one. The conditions produced a double illusory effect, each element of which sided the other. The under-estimation of the large angle disturbed the horizontal and the outward displacement of the vertical had precisely the same effect.

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## FIG. 12.

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## THE TIMES' DAILY STORY

## DON FELIPE.

BY GRANVILLE TRACE.

(Published under special arrangement with S. S. McClure Co., New York.)

D

ON FELIPE, "banker of Manila," knew that to live for the good of the church and the people, he was not the man to separate religion and business. His devotion to the strong-box was no less ardent than his ambition to be a good citizen. The latter was a peculiar sense of the organs of orientation. They are three bowl-shaped tubes lying within the head in the three planes of space and having a common base. They are filled with lymph and this lymph large behind when the head is turned suddenly in one direction or another. The consequence of the inertia is the stimulation of delicate nerve-fibers that protrude into the canal and

grasping at. But business policy dictated delay, and Don Felipe had his caller to an interview the day following.

"Well," queried Larson as Turner came back from the second encounter. "Good. His standing me off for a day was pure bluff. He was dead anxious. All there is left for us to do is to sign the papers and turn over the money."

Larson contorted his visage expressively.

"When do we sign the papers?"

"Saturday evening, and we are to do it in style—invite a dozen or two of the push-and-shove a blow-out at the castle of His Highness. A banquet is always in order with these Spaniards. A Spaniard could not have his mustache curled without giving a dinner."

Numerous paper lanterns rivaled the splendor of twenty white uniforms in the pavilion that served for a banquet hall. The Americans and their Spanish compensation to Don Felipe for an expenditure that ordinarily would have been a fortune, were seated in the same English, and there was free flowing of good wine and bad toasts.

Don Felipe, however, was not a host. He forgot amusements, and poured forth his soul. Larson was touched. He whispered: "Say, Turner, don't you think we'd better rescue of his twelve-year-old son, who was supposed to be at the plantation, 'La Honrada,' in the interior."

So Don Felipe ordered messes to be sent, and thereupon the Spaniards, who had been waiting for the man he finally gave his permission to leave. As for Turner, he had three months with a medley of bruises and beads of long standing and wide scars to receive pay of his twelve-year-old son, who was supposed to be at the plantation, 'La Honrada,' in the interior."

The setting up of the renovation of the building.

ILLUSIONS REGARDING POSITION.

Elaborate as this arrangement is, it is not impossible to find conditions under which the individual suffers illusion regarding his position. If the reader will close his eyes and try to picture on his toes, he will readily agree to this. There now arises a feeling of great uncertainty in regard to the position of the body. Each angle contributes its mite toward the total result.

Look along the lines a b and c d in the two figures. You will see that they seem to curve. The lines in the Hering figure diverge at the center; those in the Wundt figure converge. If you now lay your ruler along any one of the four lines you will find that it is perfectly straight. It is the angles at the center of the figure which produce the illusion. Each one of which forms two obtuse angles with the horizontal. Consider the acute angles as appearing too large—having their limiting sides spread in—and you will easily get the secret of the illusion. The principle is precisely the same as in the overestimated right angle which we discussed a moment ago. The illusion is plain in the Hering and Wundt figures because the effect of all the oblique is summated. Each angle contributes its mite toward the total result.

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